

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/13570	International filing date (day/month/year) 01.12.2003	Priority date (day/month/year) 06.12.2002
International Patent Classification (IPC) or both national classification and IPC A21D8/06		
Applicant UNILEVER PLC et al		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 5 sheets.

- This report contains indications relating to the following items:
 - ☒ Basis of the opinion
 - ☐ Priority
 - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Lack of unity of invention
 - ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Certain documents cited
 - ☐ Certain defects in the international application
 - ☐ Certain observations on the international application

Date of submission of the demand 01.12.2003	Date of completion of this report 13.04.2005
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Koch, J Telephone No. +31 70 340-4307 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/13570**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-3, 5-15 as originally filed
4, 4a received on 08.02.2005 with letter of 04.02.2005

Claims, Numbers

6-19 received on 02.11.2004 with letter of 29.10.2004
1-5 received on 08.02.2005 with letter of 04.02.2005

Drawings, Sheets

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/13570**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2, 3, 5-10, 12-18
	No: Claims	1, 4, 11, 19
Inventive step (IS)	Yes: Claims	
	No: Claims	1-19
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

2. Citations and explanations

see separate sheet

1. Reference is made to the following document:

D5: US-A-5 247 149 (PELEG YIGAL) 21 September 1993 (1993-09-21) cited in the application

2. Amended Claim 1 has been drafted as a product claim, however it contains process features (e.g. "dough expands; "browning and/or crisping"; "microwave cooking"). In particular, it is stated that the "sealed package [...] remains sealed during microwave cooking".

These process features must be considered as **not being inherent to the product as such** and are therefore disregarded when assessing novelty of the product as claimed in claim 1 (see the following item 3.).

3. Document D5 (cf. abstract; col. 9, line 45 - col. 10, line 42; col. 13, line 37 - col. 14, line 17; fig. 1 & 14) discloses

- a pizza for microwave cooking comprising frozen uncooked cereal dough,
- the cereal dough being contained in a sealed package leaving a free volume,
- the cereal dough being in contact with part of the inner package surface, and
- the package containing susceptor material in at least some of the contact areas.

The sealed package can be packaged in a carton (cf. col. 4, l. 4; col. 6, l. 55-57).

Further, D5 discloses microwave baking of the respective product.

The subject-matter of claims 1, 4, 11 and 19 is therefore not novel (Article 33(2) PCT).

4. Dependent claims 2, 3, 5-10, 12-18 do not contain any features which, in combination with the features of claim 1 to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows: In claims 2, 3, 5-10, 12-18, slight changes in the product of claim 1 are defined which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen. Consequently, the subject-matter of these claims also lacks an inventive step.

02. 2005

- 4 -

(108)

item, such as a pizza. The tray may be enveloped in a sealed polymer bag which has a microwave shield above the centre of the food item.

- 5 The present invention provides a food product comprising uncooked cereal dough which may be cooked in a microwave oven to provide products having desirable characteristics.

10 According to the present invention there is provided a food product for microwave cooking comprising a frozen uncooked cereal dough that expands on heating, the cereal dough being contained in a sealed package which remains sealed during microwave cooking and is dimensioned such that there is free volume within the package defined by the internal surface of the package and such
15 that after proving if necessary, cooking by microwave heating the cereal dough expands and contacts areas (contact areas) of said internal surface so that the shape of the cooked cereal dough is defined, at least in part, by said contact areas, the package comprising susceptor material in at least some of said contact
20 areas to cause browning and/or crisping of the cereal dough during microwave cooking.

It has been found that uncooked cereal dough, that expands on cooking, may be cooked in a microwave oven to provide cooked
25 products having properties similar to conventionally baked products by containing the uncooked dough in a package which is dimensioned such that it has free space but there is intimate contact between the interior surface of the package and the dough as the dough expands upon cooking. The contacting surface of the
30 package comprises susceptor material in order to apply localised heating to the surface which may result in browning and/or crisping. The package is sufficiently resilient such that it

- 4A -

provides shape retention to the cooked dough product as it expands thereby defining the shape of the cooked product.

EPO - DG 1
08.02.2005

(108)

CLAIMS

1. A food product for microwave cooking comprising a frozen
uncooked cereal dough that expands on heating, the cereal
5 dough being contained in a sealed package which remains
sealed during microwave cooking and is dimensioned such that
there is free volume within the package defined by the
internal surface of the package and such that when the cereal
dough is cooked by microwave heating the cereal dough expands
10 and contacts areas (contact areas) of said internal surface
so that the shape of the cooked cereal dough is defined, at
least in part, by said contact areas, the package comprising
susceptor material in at least some of said contact areas to
cause browning and/or crisping of the cereal dough during
15 microwave cooking.
2. A food product as claimed in Claim 1 in which the upper
surface of the food product comprises cereal dough and at
least 60% of the upper surface area of the cereal dough
20 contacts the internal surface of the package when the cereal
dough is cooked.
3. A food product as claimed in Claim 2 in which at least 80% of
the upper surface of the cereal dough is in contact with the
25 internal surface of the package when the cereal dough is
cooked.
4. A food product as claimed in any preceding claim in which the
cereal dough is selected from bread dough, pizza dough, puff
30 pastry dough, croissant dough and sponge mix.
5. A food product as claimed in any preceding claim in which
the cereal dough is filled with a savoury or sweet filling.

6. A food product as claimed in Claim 5 in which the filling is selected from meat, vegetables, fruit and combinations thereof.
- 5
7. A food product as claimed in Claim 5 or Claim 6 in which the filling is a liquid which has rheological properties so that it remains in the product after cooking.
- 10
8. A food product as claimed in any preceding Claim in which the package comprises a flexible sheet material.
9. A food product as claimed in Claim 6 in which the package consists of flexible sheet material which is wrapped around the cereal dough and sealed around its edges.
- 15
10. A food product as claimed in any one of Claims 1 to 7 in which the package is in the form of a box or carton.
- 20
11. A food product as claimed in any preceding claim in which the cereal dough is positioned in a dish or on a plate of susceptor material.
- 25
12. A food product as claimed in any preceding claim in which the substantially all of said interior surface of the package comprises the susceptor material.
13. A food product as claimed in any one of Claims 1 to 11 in which the package additionally comprises antenna material.
- 30
14. A food product as claimed in any preceding claim in which the food product is a bread roll, meat pie, fruit pie, sausage roll or croissant.

15. A food product as claimed in any preceding claim in which the cereal dough comprises yeast and the cereal dough is proven.

5

16. A food product as claimed in any preceding Claim in which the cereal dough is frozen after packaging.

10

17. A food product as claimed in any preceding Claim in which the cereal dough comprises yeast and is frozen after proving.

18. A food product as claimed in any preceding Claim in which the cereal dough comprises yeast and is frozen without proving.

15

19. A method of cooking a food product which comprises the steps of providing a food product as claimed in any preceding claim and cooking said food product in a microwave oven.

20